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State of New Jersey
Department of Environmental Protection

DONALD T. DIFRANCESCO
Acting Governor

Robert C. Shinn, J
Commissioner

Division of Solid and Hazardous Waste
401 East State Street
P.O. Box 414
Trenton, NJ 08625-0414
Phone # (609) 292-9880
Fax # (609) 633-9839

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

SEP 7 - 2001

Maria Angelo, Environmental Manager
DuPont Environmental Treatment
DuPont Chambers Works
Route 130
Deepwater NJ 08023

RE: The Class 1 Modification to Hazardous Waste Facility Permit No. 1708C1HP01 for Secure C Landfill at DuPont Chambers Works, Carneys Point and Pennsville Townships, Salem County, EPA ID No. NJD 002 385 730

Dear Ms. Angelo:

The Bureau of Hazardous Waste & Transfer Facilities (Bureau) is taking this opportunity to issue a Class 1 modification to the referenced hazardous waste facility permit in order to update permit application documents and other related information subsequent to the approval for use of Cell 5A at Secure C Landfill by letter dated July 3, 2001. In addition, this modification includes two previous Class 1 modification notifications for Secure C Landfill made to the Bureau by DuPont Chambers Works. These include (1)November 20, 2000: extension of the paved access road along the exterior sideslope of Secure C Landfill and upgrading of the leachate pipeline and sump system; and (2)April 30, 2001, and May 22, 2001: substitution of materials of construction for the liner system of Cell 5A at Secure C Landfill. The modifications made to this permit do not detract from any requirements of the existing permit nor conflict with the hazardous waste regulations.

The Department has prepared the enclosed modified permit for your records. Please confirm to the Bureau in writing that notice of the requested Class 1 modifications were sent to all persons on the facility mailing list in accordance with 40 CFR 270.42(a)(1)(ii) within ninety (90) calendar days after the changes were put into effect. A copy of the most current facility mailing list is enclosed for your reference.

If you have any questions concerning this matter, please contact Scot J. Frow of my staff at (609) 292-9880.

Very truly yours,

Anthony Fontana, Chief
Bureau of Hazardous Waste & Transfer Facilities

EP48/sjf
Enclosures

c: Barry Tornick, USEPA-Region II
John Barry, BHWCE - South

Doc: CLASS1MOD LANDFILL APPROVAL

HAZARDOUS WASTE PERMIT MODIFICATION MAILING LIST

MARCH 2000

1. Anthony Fontana, Chief
Bureau of Hazardous Waste & Transfer Facilities
New Jersey Department of Environmental Protection
Division of Solid & Hazardous Waste
401 E. State St.
P.O. Box 414
Trenton, NJ 08625-0414

2. Barry Tornick, Chief
New Jersey Section
RCRA Program Branch
United States Environmental Protection Agency - Region II
290 Broadway
New York, NY 10007-1866

3. Hazardous Waste Facilities Siting Commission
28 W. State St.
P.O. Box 406
Trenton, NJ 08625-0406

4. Public Access Center
Office of Communications
New Jersey Department of Environmental Protection
P.O. Box 402
Trenton, NJ 08625-0402

5. Mayor of host municipality

6. Mayors of municipalities located within 1 mile radius of the facility

7. Planning Board of host county

8. (For facilities located in the following counties: Bergen, Essex, Hudson, Hunterdon, Morris, Passaic, Somerset, and Sussex)

Jeff Sterling, Section Chief
New Jersey Department of Environmental Protection
Bureau of Hazardous Waste Compliance & Enforcement
Northern Region
1259 Route 46
Building 2
Parsippany, NJ 07054-4191

9. (For facilities located in the following counties: Mercer, Middlesex, Monmouth, Ocean, and Union)

John Barry, Section Chief
New Jersey Department of Environmental Protection
Bureau of Hazardous Waste Compliance & Enforcement
Central Region
300 Horizon Center
P.O. Box 407
Trenton, NJ 08625-407

10. (For facilities located in the following counties: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem)

John Skoviak, Section Chief
New Jersey Department of Environmental Protection
Bureau of Hazardous Waste Compliance & Enforcement
Southern Region
One Port Center
2 Riverside Drive
Suite 201
Camden, NJ 08102

11. (For modifications involving new construction)

Andrew Didun, Supervisor
Office of Environmental Review
New Jersey Department of Environmental Protection
Division of Fish & Wildlife
501 E. State St.
P.O. Box 400
Trenton, NJ 08625-0400

12. (For modificatons that involve air emissions)

Iclal Atay, Chief
Bureau of Air Quality Engineering
New Jersey Department of Environmental Protection
P.O. Box 27
Trenton, NJ 08625-0027

13. (For modifications that involve water discharges)

Narinder Ahuja, Assistant Director
Watershed Permitting Element
New Jersey Department of Environmental Protection
Division of Water Quality
P.O. Box 029
Trenton, NJ 08625-0029

14. (For modifications that involve construction and may have land use regulation applicability)

Richard Kropp, Director
Land Use Regulation, Compliance and Enforcement
New Jersey Department of Environmental Protection
P.O. Box 401
Trenton, NJ 08625-0401

15. (For facilities located in the New Jersey Pinelands)

Attn: Project Review
Pinelands Commission
P.O. Box 7
New Lisbon, NJ 08064

16. (For facilities located in the Delaware River Basin)

Delaware River Basin Commission
P.O. Box 7360
West Trenton, NJ 08628

17. Applicable persons per the Bureau's List of Requestors

18. Any other person or agency included in the Bureau's list of interested parties for the facility

Doc: STD-MODMAILLIST.HWF.doc

HAZARDOUS WASTE FACILITY LIST OF REQUESTORS

NOVEMBER 1998

1. David M. Matthews
Manager, Environmental Affairs
Bristol-Myers Squibb
P.O. Box 4000
Princeton, NJ 08543-4000

Facility Types	Counties
All	All

2. Vincent Lehotsky
136 Chilton Hall, Apt. # C1
Elizabeth, NJ 07202-1428

Facility Types	Counties
All	All

3. Keith Michels
Technical Support Manager
Safety-Kleen (Bridgeport), Inc.
P.O. Box 337
Bridgeport, NJ 08014-0337

Facility Types	Counties
All	All

4. Robert Fixter
Vice-President of Compliance
S&W Waste, Inc.
115 Jacobus Ave.
S. Kearny, NJ 07032

Facility Types	Counties
All	All

5. Tony Dilodovico
Regulatory Compliance Agent
Schoor Depalma
200 Route 9
P.O. Box 900
Manalapan, NJ 07726

Facility Types	Counties
All	All

6. Daniel Toder
Senior Associate
Killam Associates
27 Bleeker St.
Millburn, NJ 07041

Facility Types	Counties
All	All

7. Phil Reynolds
General Manager
Garden State Environet
75-D Upper Hibernia Rd.
Rockaway, NJ 07866

Facility Types	Counties
All	All

8. Sunil K. Garg
Vice President
ISP Environmental Services, Inc.
1361 Alps Rd.
Wayne, NJ 07470

Facility Types	Counties
All	All

9. Albert Fralinger
Manager - Resource Recovery
PSE&G
80 Park Plaza
MC 23C
Newark, NJ 07101

Facility Types	Counties
All	All

10. William Dressler
Associate Director
N.J. Gasoline Retailers & Allied Trades
66 Morris Ave.
Springfield, NJ 07081

Facility Types	Counties
All	All

11. Barbara Walsh, PP/AICP
Bergen County Dept. of Planning & Economic Dev.
21 Main St.
Hackensack, NJ 07601-7000

Facility Types	Counties
All	Bergen

12. Barbara Sachar
15 Elm St.
Florham Park, NJ 07932

Facility Types	Counties
All	Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, Warren

13. Barry Seymour
Assistant Executive Director
PVRPC
111 SE Independence Hall
Philadelphia, PA 19106

Facility Types	Counties
All	Burlington, Camden, Gloucester, Mercer

14. Stanley C. Carver
Director, Engineering
Hoeganaes Corp.
River Rd. & Taylors Lane
Riverton, NJ 08077

Facility Types	Counties
All	Burlington, Camden, Gloucester

15. Jerry Favretto
1815 Macavoy Terrace
Millville, NJ 08332

Facility Types	Counties
All	Cumberland, Salem

16. Orion C. Joyner
Department of Utilities
Room 419, City Hall
520 Market St.
Camden, NJ 08105

Facility Types	Counties
All	Atlantic, Burlington, Camden, Gloucester

17. Gary Forosisky
President
G.E. Mechanical, Inc.
2316 S. Main Rd.
Vineland, NJ 08360

Facility Types	Counties
All	Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, Salem

18. William F. Harrison
Assistant Director
New Jersey Pinelands Commission
P.O. Box 7
New Lisbon, NJ 08064

Facility Types	Counties
All	Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean

19. Ernest J. Kuhlwein, Jr.
Assistant Director
Dept. of Solid Waste Management
County of Ocean
P.O. Box 2191
Toms River, NJ 08754-2191

Facility Types	Counties
All	Ocean

20. Ocean County Environmental Agency
1623 Whitesville Rd.
Toms River, NJ 08755

Facility Types	Counties
All	Ocean

21. Richard Westergaard
Principal Planner
Gloucester County Planning Dept.
County Office Bldg.
North Delsea Dr.
Clayton, NJ 08312

Facility Types	Counties
All	Gloucester

22. Michael Yusella
Manager of Environmental Affairs
Ingersoll-Dresser Pump Company
942 Memorial Parkway
Phillipsburg, NJ 08865

Facility Types	Counties
All	Hunterdon, Mercer, Morris, Somerset, Warren

23. Ronald J. Senna
Director - Environmental Affairs
International Flavors & Fragrances
800 Rose Lane
Union Beach, NJ 07735

Facility Types	Counties
All	Middlesex, Monmouth

24. Blanche D. Hoffman
Chair
Old Bridge Environmental Commission
48 Margaret St.
Old Bridge, NJ 08857

Facility Types	Counties
All	Middlesex

25. Alan Johnson
Acting Director
Hunterdon County Utilities Authority
Victorian Plaza
1 East Main St.
Flemington, NJ 08822

Facility Types	Counties
All	Hunterdon, Mercer, Morris, Somerset, Warren

26. Alice Tempel
Environmental Specialist
South Plainfield Environmental Commission
Municipal Building
2480 Plainfield Ave.
South Plainfield, NJ 07080

Facility Types	Counties
All	Middlesex, Union

27. Ray Ching
Environmental Commissioner
Borough of Red Bank
66 Leighton Ave.
Red Bank, NJ 07701-1213

Facility Types	Counties
All	Mercer, Middlesex, Monmouth, Ocean, Union

28. Harold E. Miller
M3I Environmental Services
626 East Landis Ave.
M/S N-111
Vineland, NJ 08360

Facility Types	Counties
All	Atlantic, Bergen, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Passaic, Salem, Union, Warren

29. William Pohl
Environmental Engineer
Bayway Refining Company
1400 Park Ave.
Linden, NJ 07036

Facility Types	Counties
All Commercial	All

30. Jim Millikin
Environmental Manager
Hatco Corp.
1020 King George Post Rd.
Fords, NJ 08863

Facility Types	Counties
All Commercial	All

31. R. W. Goodwin
Environmental Engineering Con
14 Ramapo Lane
Saddle River, NJ 07458-1321

Facility Types	Counties
All Incineration & Land Disposal	All

32. David C. Parris
Curator of Natural History
New Jersey State Museum
P.O. Box 530
Trenton, NJ 08625-0530

Facility Types	Counties
All Land Disposal & Storage/Treatment	All

33. Nora P. Nealis
NCA-I
252 W. 29th St.
New York, NY 10001

Facility Types	Counties
Commercial Storage/Treatment	All

34. Mary Bacchetta
EHS Consultant
Hewlett-Packard Co.
150 Green Pond Rd.
Rockaway, NJ 07866

Facility Types	Counties
All Commercial	Cape May, Essex, Middlesex, Morris, Warren

35. James Jahnke
Environmental Engineer
Novartis Pharmaceuticals Corp.
556 Morris Ave.
Summit, NJ 07901

Facility Types	Counties
All Commercial	Bergen, Essex, Hudson, Mercer, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren

36. Kenneth A. DiMuzio
President
Kenneth A. DiMuzio, P.A.
25 Hunter St.
Woodbury, NJ 08096

Facility Types	Counties
All Commercial	Atlantic, Cumberland, Gloucester, Salem

37. John P. Sandstedt
Director, Regulatory Compliance
Sybron Chemicals Inc.
Birmingham Road
P.O. Box 66
Birmingham, NJ 08011

Facility Types	Counties
All Commercial	Burlington, Camden, Gloucester, Middlesex, Somerset, Union

38. Thomas M. Ryan
Regional Manager, State Govt. Relations
Ford Motor Co.
1350 "I" St., NW, Suite 1000
Washington, DC 20005

Facility Types	Counties
All Non-commercial	Bergen, Middlesex, Passaic, Somerset, Sussex, Union

39. Chester Makowski, REP, CHMM
Manager - EH&S
Givaudan Roure Corp.
1 Merry Lane
East Hanover, NJ 07936

Facility Types	Counties
Non-commercial Storage/Treatment	Morris

40. Ronald Cohen
William Zinsser & Co., Inc.
173 Belmont Dr.
Somerset, NJ 08875

Facility Types	Counties
Non-commercial Incinerators Commercial Land Disposal Commercial Storage/Treatment Non-commercial Storage/Treatment	Essex, Somerset

41. Ms. Jan Larson, Chairperson
Dover Township Environmental Commission
33 Washington St.
Toms River, NJ 08753

Facility Types	Counties
All Incineration & Land Disposal	Burlington, Monmouth, Ocean

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State of New Jersey
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Division of Solid & Hazardous Waste
P.O. Box 414
Trenton, New Jersey 08625-0414
Phone# 609-292-9880
Fax# 609-633-9839

Hazardous Waste Facility Permit

Under the provisions of N.J.S.A. 13:1E-1 et seq. known as the Solid Waste Management Act, this permit is hereby issued to:

E.I. du Pont de Nemours and Company, Inc.
Chambers Works
Deepwater NJ 08023

For the Purpose of Operating:	Secure C Landfill
On Block No.:	185
Lot No.:	1
In the Municipality of:	Carneys Point Township
County:	Salem
Under Facility Permit No.:	1708C1HP01
EPA ID No.:	NJD 002 385 730

This permit is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection.

This permit shall not prejudice any claim the State may have to riparian land, nor does it allow the permittee to fill or alter or allow to be filled or altered in any way, lands that are deemed to be riparian, wetlands, stream encroachment areas or flood plains, or that are within the Coastal Area Facility Review Act (CAFRA) zone or are subject to the Pinelands Protection Act of 1979, nor shall it allow the discharge of pollutants to waters of this State without prior acquisition of the necessary grants, permits, or approvals from the Department of Environmental Protection or the U.S. Environmental Protection Agency.

October 9, 1998
Issuance Date

Thomas Sherman, Assistant Director
Division of Solid & Hazardous Waste

November 9, 1998
Effective Date

April 16, 2001
Modification Date

August 31, 2001
Modification Date

November 9, 2008
Expiration Date

Table of Contents

Scope of Permit

The hazardous waste rules at N.J.A.C. 7:26G were adopted by the New Jersey Department of Environmental Protection on October 21, 1996. By this adoption, the Department "incorporated by reference" (with limited exception) the July 1, 1993 version of the Federal hazardous waste regulations found at Parts 124, 260-266, 268 and 270, Title 40 of the Code of Federal Regulations (C.F.R.). Those provisions of the Federal regulations which were not incorporated by reference are listed in the State regulatory adoption. Additional changes to the New Jersey hazardous waste rules will be necessary to address Federal regulations adopted subsequent to July 1, 1993. The Department will adopt amendments to N.J.A.C. 7:26G to incorporate by reference those changes to the Federal regulations that have been made since July 1, 1993, and a prospective incorporation by reference which will incorporate all future amendments and supplements to the Federal regulations automatically. Within 180 days of the effective date of these amendments to N.J.A.C. 7:26G, the Department will initiate a modification of this permit to incorporate such provisions as are made necessary by the newly adopted rules.

The conditions of this permit are based on the New Jersey hazardous waste regulations at N.J.A.C. 7:26G and on the permit application submitted by the permittee. In order to eliminate confusion, and to clearly describe the precise obligations which are imposed upon the permittee, only the specific Federal regulatory citations as of July 1, 1993 are listed in the conditions of this permit. For the applicable State regulatory citations, refer to N.J.A.C. 7:26G.

This permit, along with the referenced permit application documents herein specified, shall constitute the sole Hazardous Waste Facility Permit for the operation of a hazardous waste disposal facility at DuPont Chambers Works in Deepwater, Salem County, New Jersey. Any registration, approval, or permit previously issued by the Division of Solid & Hazardous Waste or its predecessor agencies to authorize landfill operations at the subject facility is hereby superseded. The permittee need not comply with the conditions of this permit to the extent and for the duration such non-compliance is authorized by an emergency permit (40 C.F.R. § 270.61).

Section I of this permit contains the general conditions applicable to all hazardous waste facilities. Section II of this permit contains general conditions applicable to DuPont Chambers Works. Section III of this permit contains specific conditions applicable to the hazardous waste management practices at DuPont Chambers Works.

Description of Hazardous Waste Activities

This permit authorizes DuPont Chambers Works to operate a hazardous waste disposal facility, Secure C Landfill, at the Chambers Works site. Secure C Landfill is used to dispose of sludge filter cake generated by the onsite wastewater treatment plant and other various types of bulk hazardous and non-hazardous waste from onsite and offsite DuPont sources.

Area I, which is single-lined, was closed prior to the promulgation of RCRA regulations and is therefore considered to be a non-RCRA regulated waste management unit.

Areas II and III are operating and are underlain by a two liner system equipped with leachate collection and leachate leak detection systems. The liner system consists of two Hypalon liners, each 30 mils (0.03 inches) thick, separated by a twelve (12) inch leak detection layer. The leak detection layer consists of an eight (8) inch layer of gravel overlain with a four (4) inch layer of sand. The upper liner is overlain by a twelve (12) inch layer of gravel which serves as the leachate collection system. The lower liner is constructed upon compacted fill material.

Area IV is operating and is underlain by a two liner system equipped with leachate collection and leachate leak detection systems. The liner system consists of two Hypalon liners, each 45 mils (0.045 inches) thick and each overlain with Typar 3341 geotextile, separated by a twelve (12) inch leak detection layer. The leak detection layer consists of a six (6) inch layer of gravel overlain with a Typar 3341 geotextile and six (6) inches of sand. The upper liner system is overlain by two (2) feet of gravel and a Typar 3341 geotextile and serves as the leachate collection system. The lower liner is underlain by three (3) feet of compacted clay constructed upon compacted fill material.

These landfill systems are designed to handle all leachate generated during a 24 hour, 25 year storm; designed so that leachate depth over the top liner never exceeds twelve (12) inches; designed so that the system will function without clogging; and constructed so that all leachate generated flows by gravity into collection sumps. Operating characteristics of the leachate collection system have demonstrated that the system is functioning as the design intended.

Summary of Permit Modification Actions

On April 16, 2001, a Class 3 Permit Modification was issued for the Secure C Landfill permit which served to authorize the construction and subsequent operation of landfill cell 5A (Area V). Area V is designed as a state of the art double composite liner system equipped with leachate collection and leachate leak detection systems. The double composite liner system consists of two Hypalon geomembrane liners, each 45 mils (0.045 inches) thick and each overlain with engineered materials to provide cushioning for the geomembrane and promote drainage of leachate. The lower liner system is composed of the lower geomembrane underlain by three (3) feet of compacted clay and is constructed upon compacted fill material. The leak detection layer located between the two liner

systems consists of a composite biplanar geonet with geotextile filter and twelve (12) inch layer of granular drainage material which is overlain by the geosynthetic clay liner and upper geomembrane which comprise the upper liner system. The upper liner system is overlain by a cushioning geotextile, two (2) feet of gravel, and a geotextile filter which serves as the leachate collection system. Cell 5A has been designed to tie into existing landfill components of Areas III and IV of Secure C Landfill to maintain a continuous barrier between disposed materials and native soils and groundwater.

On August 31, 2001, a Class 1 Permit Modification was issued for the Secure C Landfill permit which served to update permit application documents and other related information subsequent to the approval for use of Cell 5A at Secure C Landfill. This modification also included changes due to two Class 1 permit modification requests for (1)extension of the paved access road along the exterior sideslope of Secure C Landfill and upgrading of the leachate pipeline and sump system; and (2)substitution of materials of construction for the liner system of Cell 5A at Secure C Landfill including details on the bonding of geomembranes. Specifically, 60 mil high density polyethylene was substituted for the 45 mil hypalon geomembrane approved by the April 16, 2001, Class 3 Permit Modification and was tied into the existing liner systems of Areas III and IV as per the details provided.

Summary of Permit Compliance Conditions

The permittee shall submit a Landfill Monitoring Report on an annual basis on or before April 30 of each year in accordance with Condition 1(e) of Section III of this permit.

The permittee shall submit monthly progress reports on the construction of Area V (cell 5A) of Secure C Landfill in accordance with Condition 7(a) of Section III of this permit.

The permittee shall submit construction certification letters at the completion of the construction of Area V (cell 5A) of Secure C Landfill in accordance with Condition 7(b) of Section III of this permit.

Section I

General Conditions Applicable to All Permits (40 C.F.R. § 270.30)

1. Duty to Comply

The permittee must comply with all conditions of this permit, except that the permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit. (See 40 C.F.R. § 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of the appropriate Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2. Duty to Reapply

(a) If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

(b) A complete application for a new permit shall be submitted at least one hundred eighty (180) days prior to the expiration date of this permit.

3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Need to Mitigate

In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

5. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any relevant information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

9. Inspection and Entry

The permittee shall allow an authorized representative of the Department upon the presentation of credentials and other documents as may be required by law to:

(a) Enter at reasonable times upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

10. Monitoring and Records

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, the certification required by 40 C.F.R. § 264.73(b)(9) of this chapter, and

records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, certification, or application. This period may be extended by request of the Department at any time. The permittee shall maintain records from all ground-water monitoring wells and associated ground-water surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.

(c) Records for monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) analyses were performed;

(4) The individual(s) who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of such analyses.

11. Signatory Requirements

All applications, reports, or information submitted to the Department shall be signed and certified. (see 40 C.F.R. § 270.11).

12. Reporting Requirements

(a) Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility.

(b) Anticipated Noncompliance

(1) The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee may not treat, store, or dispose of hazardous waste; and for a facility being modified, the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility except as provided in 40 C.F.R. § 270.42, until:

(i) The permittee has submitted to the Department by certified mail or hand delivery a letter signed

by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

(ii) (A) The Department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or

(B) If, within 15 days of the date of submission of the letter in paragraph 12(b)1i of this section, the permittee has not received notice from the Department of his or her intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of hazardous waste.

(c) Transfers

This permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under RCRA. (See 40 C.F.R. § 270.40).

(d) Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(e) Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-Four Hour Reporting

(1) The permittee shall report any noncompliance which may endanger health or the environment orally within 24 hours from the time the permittee becomes aware of the circumstances, including:

(i) Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.

(ii) Any information of a release or discharge of hazardous waste or of a fire or explosion from the HWM facility, which could threaten the

environment or human health outside the facility.

(2) The description of the occurrence and its cause shall include:

(i) Name, address, and telephone number of the owner or operator;

(ii) Name, address, and telephone number of the facility;

(iii) Date, time, and type of incident;

(iv) Name and quantity of material(s) involved;

(v) The extent of injuries, if any;

(vi) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

(vii) Estimated quantity and disposition of recovered material that resulted from the incident.

(3) A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Department may waive the five day written notice requirement in favor of a written report within fifteen days.

(4) Oral Notification shall be provided to the NJDEP Hotline at (877)WARN DEP. Written notification shall be provided to the Bureau of Hazardous Waste and Transfer Facilities and the Bureau of Hazardous Waste Compliance and Enforcement at the addresses provided in Condition 11 of Section II of this permit.

(g) Manifest Discrepancy Report

If a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy. If not resolved within fifteen days, the permittee must submit a letter report, including a copy of the manifest, to the Department. (See 40 C.F.R § 264.72.)

(h) Unmanifested Waste Report

This report must be submitted to the Department within 15 days of receipt of unmanifested waste. (See 40 C.F.R. § 264.76.)

(i) Biennial Report

A biennial report must be submitted covering facility activities during odd numbered calendar years. (See 40 C.F.R. § 264.75.)

(j) Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e) and (f) of this condition, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this condition.

(k) Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

End of Section I

Section II

General Conditions Applicable to DuPont Chambers Works

1. Permit Modification or Revocation and Reissuance

Cause for, and procedures of, modification, or revocation and reissuance of this permit shall be as provided under 40 C.F.R. § 270.41.

2. Personnel Training (40 C.F.R. § 264.16)

(a) Facility personnel shall successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that insures the facility's compliance with the requirements of 40 C.F.R. § 264.16, as stated in the facility's Part B permit application, and as referenced in Condition 12(b) of Section II of this permit. New employees shall be trained within six (6) months of the date of employment.

(b) The training program shall be maintained with records and documentation describing the type and amount of both introductory and continuing training that has been and will be given to each person engaged in hazardous waste management at the facility.

(c) The permittee shall keep the training records on current personnel until closure of the facility; training records on former employees shall be kept for at least three (3) years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

3. Preparedness and Prevention (40 C.F.R. §264.30 through §264.37)

The facility shall be designed, constructed, maintained and operated to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, surface water or groundwater which could threaten human health or the environment.

(a) The facility shall be equipped with emergency equipment, including but not limited to:

(1) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

(2) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire

departments, or State or local emergency response teams;

(3) Portable fire extinguisher, fire control equipment, spill control equipment, and decontamination equipment; and

(4) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

(b) All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure its proper operation in time of emergency.

4. Contingency Plan (40 C.F.R. § 264.50 through § 264.56)

(a) The provisions of the Contingency Plan included in the Part B permit application plus all amendments, revisions and modifications thereof subsequently submitted for review and accepted by the Department, and as referenced in Condition 12(b) of Section II of this permit, shall be carried out immediately whenever there is a fire, explosion or release of hazardous waste constituents which could threaten human health or the environment.

(b) When an emergency coordinator determines that the facility has had a discharge, fire, or explosion which could threaten human health or the environment outside the facility, the emergency coordinator shall immediately notify the local Fire Department, local Police Department, and other officials if an assessment indicates that evacuation of local areas may be advisable. The emergency coordinator shall be available to help officials decide if local areas should be evacuated. The telephone numbers are:

Emergency Management:	(856)769-2900
Fire Department:	(856)678-4505
Police Department:	(856)678-7777

(c) (1) If the facility has a discharge, fire, or explosion which could threaten human health or the environment, the following shall be notified immediately:

New Jersey Department of Environmental Protection
Communication Center/Trenton Dispatch
Bureau of Communication and Support Services
Trenton, NJ 08625
Telephone 1-877-WARN DEP (24 Hours)

(2) Additionally, if the emergency coordinator determines that the facility has had a discharge, fire, or explosion which could threaten human health or the environment outside the facility, the emergency coordinator shall immediately notify:

National Response Center
2100 Second Street, SW
Washington, D.C. 20593
Telephone 1-800-424-8802 (24 Hours)

(d) If the emergency coordinator determines that the facility has had a discharge, fire, or explosion which would threaten human health or the environment, the emergency coordinator shall immediately notify the agencies listed in Condition 4(c) above. When notifying these agencies, the coordinator shall report the type of substance and the estimated quantity discharged, if known; the location of the discharge; actions the person reporting the discharge proposes to take to contain, clean up and remove the substance if any and any other information concerning the discharge which the Department may request at the time of notification.

(e) The owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the owner or operator shall submit a written report on the incident to the Department. The report shall include, but not be limited to:

(1) Name, address, and telephone number of the owner or operator;

(2) Name, address, and telephone number of the facility;

(3) Date, time, and type of incident;

(4) Name and quantity of material(s) involved;

(5) The extent of injuries, if any;

(6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(7) An estimated quantity and disposition of recovered material that resulted from the incident.

5. Security (40 C.F.R. § 264.14)

(a) The permittee must maintain the security procedures as described in the facility's Part B permit application plus all amendments, revisions and modifications thereof

subsequently submitted for review and accepted by the Department, and as referenced in Condition 12(a) of Section II of this permit.

(b) The permittee shall prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the facility.

(1) A facility shall have:

(i) A 24-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility; or

(ii) An artificial or natural barrier, which completely surrounds the active portion of the facility; and a means to control entry, at all times, through the gates or other entrances to the active portion of the facility.

(2) The requirements of paragraph (b)1 are satisfied if the hazardous waste storage, treatment or disposal site is located in a facility which itself has a surveillance system, or a barrier and a means to control entry, which complies with the requirements of subparagraph (b)1i or (b)1ii.

(3) The owner or operator shall post a sign with the legend, "Danger - Unauthorized Personnel Keep Out", at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend shall be written in English and in any other language prevalent in the area surrounding the facility and must be legible from a distance of at least twenty five (25) feet. Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

6. Termination of a Permit (40 C.F.R. § 270.43)

The following are causes for terminating a permit during its term or for denying a permit renewal application:

(a) Noncompliance with any condition of this permit; or

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

(c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

7. Operating Record (40 C.F.R. § 264.73)

The permittee shall keep a written operating record at the facility in which the information required under 40 C.F.R. § 264.73(b) shall be recorded. The information shall be recorded as it becomes available and maintained in the operating record until closure of the facility.

8. Permit Limitations (40 C.F.R. § 270.4(c))

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights or any infringement of applicable Federal, State, or local laws or regulations.

9. Financial Requirements (40 C.F.R. Part 264 Subpart H)

(a) The permittee shall maintain financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility. The permittee shall have and maintain liability coverage for sudden occurrences in the amount of at least $3 million per occurrence with an annual aggregate of at least $6 million exclusive of legal defense costs. The permittee shall demonstrate financial responsibility for sudden accidental occurrences according to the mechanisms given in 40 C.F.R. § 264.147 paragraphs (a)(1), (2), (3), (4), (5) or (6).

(b) The permittee shall establish financial assurance for closure of the facility. The permittee shall use a financial assurance mechanism approved by the Department, from the options specified in paragraphs (a) through (f) of 40 C.F.R. § 264.143.

(c) The permittee shall have a detailed written closure cost estimate of closing the facility in accordance with 40 C.F.R. § 264.142(a). The permittee shall adjust the closure cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with 40 C.F.R. § 264.143. If the permittee uses the financial test or corporate guarantee, the closure cost estimate shall be updated for inflation within thirty (30) days after the close of the firm's fiscal year and before submission of the updated information to the Department. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit

Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business.* The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(1) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(2) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(d) During the active life of the facility, the permittee shall revise the closure cost estimate no later than (30) days after the Department has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in 40 C.F.R. § 264.142(b).

(e) The permittee shall keep at the facility during the operating life of the facility, the latest closure cost estimate prepared in accordance with 40 C.F.R. § 264.142(a) and (c) and, when this estimate has been adjusted in accordance with 40 C.F.R. § 264.142(b), the latest adjusted closure cost estimate.

(f) The wording of all financial documents (except for the insurance policy itself) that are submitted under paragraphs (a), (b) and (c) of this Condition must be as per 40 C.F.R. § 264.151 with the changes specified at N.J.A.C. 7:26G-8.1(c)8.

10. Compliance with Other State Regulations and Statutes

The permittee shall comply with all regulations of the Department of Environmental Protection and other State Statutes applicable to the facility. Regulations are effective upon publication in the New Jersey Register or as otherwise indicated in the Notice of Adoption in the New Jersey Register.

11. Submission of Documents Required by Permit Conditions

The permittee shall submit all permit compliance documents required by this permit to the following:

(a) New Jersey Department of Environmental Protection
Bureau of Hazardous Waste and Transfer Facilities
401 East State Street
P.O. Box 414
Trenton NJ 08625-0414

(b) New Jersey Department of Environmental Protection
Bureau of Hazardous Waste Compliance and Enforcement
One Port Center
2 Riverside Drive, Suite 201
Camden NJ 08102

12. Referenced Permit Application Documents

(a) The permittee shall operate the facility, and construct or install associated appurtenances thereto, in accordance with the regulations contained in 40 C.F.R. Parts 260 through 270, the conditions of this permit, and the following permit application documents:

(1) Section D-1 of the RCRA Part B Permit Application dated November 1987, revised January 1988, and the following engineering designs submitted in Appendix F of Section D-1:

DWM1791 Revision 4
DWM1794 Revision 21
DWM1911 Revision 2
W485500 Revision 78
W576321 Revision 24
W605550 Revision 20

(2) Section I, Appendix H, of the RCRA Part B Permit Application, Closure and Post-Closure Plan for Secure C Landfill, dated November 1988.

(3) Section F of the RCRA Part B Permit Application, Procedures to Prevent Hazards at Secure C Landfill, dated December 1988.

(4) Secure C Landfill Area IV Final Construction Certification Report Volumes I-IV dated May 1989, and the following engineering designs submitted in Attachment 2 of Volume II:

W939532 Revision 44
W983659 Revision 0
W919316 Revision 17
W923899 Revision 23

(5) Request to Modify Sideslope Tie-in of Areas III and IV for Secure C Landfill, dated December 10, 1991, and the following engineering designs submitted with the request:

DWM1943 Revision 0
DWM1944 Revision 0

(6) Construction Certification Report on Area IV Sideslope Cover Installation dated January 27, 1993, and the following engineering designs submitted with the report:

W927199 Revision 14
W927200 Revision 4

(7) Permit Renewal Application and Vertical Expansion Proposal for Secure C Landfill dated March 30, 1993 and the following engineering designs submitted with the application:

W1218244 Revision 0
W1218245 Revision 0
W1230459 Revision 0

(8) Revised Permit Renewal Application Documents for Secure C Landfill dated August 5, 1993.

(9) Revised Personnel Training Plan, Contingency Plan, and Waste Analysis Plan submitted by letter dated November 24, 1993.

(10) Secure C Landfill Permit Renewal and Modification Application, Volumes 1 and 2, dated February 5, 1998, and the following engineering designs included in the application:

W1425557 Revision 0
W1425556 Revision 0
W1425554 Revision 0

(11) Response to Notice of Deficiency on Landfill Permit Renewal dated April 24, 1998.

(12) Revisions to the Waste Analysis Plan for Secure C Landfill dated July 31, 1998.

(13) Added 4/16/01
(13) RCRA Part B Permit Application for Lateral Expansion of Secure C Landfill, Volumes I, II, and III, dated June 15, 1998, and cover letter dated June 19, 1998.

(14) Added 4/16/01
(14) Environmental and Health Impact Statement (EHIS) on the Expansion of the DuPont Chambers Works Commercial Hazardous Waste Facility, dated April 26, 1999, and the May 3, 1999, Supplemental Information for Final Environmental and Health Impact Statement for DuPont Chambers Works Hazardous Waste Facility Expansion.

(15) Added 4/16/01
(15) Response to the Department's November 16, 1999, Technical Notice of Deficiency for the Lateral Expansion of Secure C Landfill (Responses to Landfill Design Comments), dated December 22, 1999.

(16) Added 4/16/01
(16) Response to the Department's November 16, 1999, Technical Notice of Deficiency for the Lateral Expansion of Secure C Landfill (Responses to EHIS Document Comments), dated April 11, 2000.

(17) Added 4/16/01
(17) Submission on the Control of Fugitive Dust Emissions at Secure C Landfill, dated May 30, 2000.

(18) Added 8/31/01
(18) Notice of Class 1 Permit Modification for Secure C Landfill including the extension of the paved access road along the exterior sideslope of Secure C Landfill and upgrading of the leachate pipeline and sump system, dated November 20, 2000.

(19) Added 8/31/01
(19) Monthly Progress Report No.1 covering Cell 5A construction through the month of March 2001, prepared by GeoSyntec Consultants for DuPont Chambers Works, dated April 5, 2001.

(20) Added 8/31/01
(20) Notice of Class 1 Permit Modification for Secure C Landfill for substitution of materials of construction for the liner system of Cell 5A at Secure C Landfill, dated April 30, 2001.

(21) Added 8/31/01
(21) Monthly Progress Report No.2 covering Cell 5A construction during the month of April 2001, prepared by GeoSyntec Consultants for DuPont Chambers Works, dated May 9, 2001.

(22) Added 8/31/01
(22) Additional Class 1 Permit Modification Information for Secure C Landfill including details on the bonding of different geomembranes within the liner system, dated May 22, 2001.

(23) Added 8/31/01
(23) Construction Quality Assurance "Subgrade" Final Report for Cell 5A prepared by GeoSyntec Consultants for DuPont Chambers Works, dated June 13, 2001.

(24) Added 8/31/01
(24) Monthly Progress Report No.3 covering Cell 5A construction during the month of May 2001, prepared by GeoSyntec Consultants for DuPont Chambers Works, dated June 14, 2001.

(25) Added 8/31/01
(25) Construction Quality Assurance "Low Permeability Soil Layer" Final Report for Cell 5A prepared by

GeoSyntec Consultants for DuPont Chambers Works, dated June 27, 2001.

(26) Added 8/31/01
(26) Final Specifications, Design Drawings, and CQA Plan for Cell 5A, submitted by John L. Guglielmetti, P.E., Geotechnical Consultant, DuPont Engineering, dated June 27, 2001.

(27) Added 8/31/01
(27) Construction Quality Assurance "Geosynthetic Installation" Final Report for Cell 5A prepared by GeoSyntec Consultants for DuPont Chambers Works, dated June 29, 2001.

(28) Added 8/31/01
(28) Monthly Progress Report No.4 covering Cell 5A construction during the month of June 2001, prepared by GeoSyntec Consultants for DuPont Chambers Works, dated June 30, 2001.

(29) Added 8/31/01
(29) Construction Quality Assurance "Leachate Collection System" Final Report for Cell 5A prepared by GeoSyntec Consultants for DuPont Chambers Works, dated July 1, 2001.

(30) Added 8/31/01
(30) Construction Quality Assurance Certification Statement for Cell 5A, prepared by GeoSyntec Consultants and signed by Sean J. McCormack, CQA Site Manager, James Single, Regional Manager, and Eric S. Steinhauser, P.E., GeoSyntec Consultants, dated July 1, 2001.

(31) Added 8/31/01
(31) Cell 5A Construction Owner/Operator Certification Statement, submitted by Vincent G. Giardino, Project Manager, DuPont Environmental Treatment, and signed by Paul J. Gorzsas, DET Operations Manager, DuPont Chambers Works, dated July 2, 2001.

In case of conflict, the applicable hazardous waste management regulations contained in 40 C.F.R. shall have precedence over the conditions of this permit, and the conditions of this permit shall have precedence over the Part B permit application documents listed above.

(b) One complete set of the permit application documents listed in Condition 12(a) above, this Hazardous Waste Facility Permit, and all records, reports and plans as may be required pursuant to this permit shall be kept on-site and shall be available for inspection by authorized representatives of the Department upon presentation of credentials. The records, reports and plans required pursuant to this permit include the following:

(1) The description of the personnel training program and the records required by Condition 2 of Section II of this permit and 40 C.F.R. § 264.16.

(2) The Contingency Plan required by Condition 4 of Section II of this permit and 40 C.F.R. § 264.50, and specifically the plan dated January 1998.

(3) The written Operating Record required by Condition 7 of Section II of this permit and 40 C.F.R. § 264.73.

(4) Copies of the financial documents and closure cost estimate required by Condition 9 of Section II of this permit and 40 C.F.R. § 264.140.

(5) The Waste Analysis Plan outlined in Condition 3 of Section III of this permit and as required by 40 C.F.R. § 264.13, and specifically the plan dated February 5, 1998, revised July 31, 1998.

(6) The Inspection Schedule required by 40 C.F.R. § 264.15(b) and the records required by Condition 4 of Section III of this permit.

(7) Modified 4/16/01
(7) The Closure Plan required by Condition 5 of Section III of this permit and 40 C.F.R. § 264.112 and specifically the plan dated March 30, 1993, revised February 5, 1998, and updated June 15, 1998.

(8) Modified 4/16/01
(8) The Post-Closure Plan required by Condition 6 of Section III of this permit and 40 C.F.R. § 264.112 and specifically the plan dated March 30, 1993, revised February 5, 1998, and updated June 15, 1998.

End of Section II

Section III

Specific Conditions Applicable to DuPont Chambers Works

1. Modified 4/16/01
1. Authorized Activities

The permittee is authorized to operate Areas II, III, and IV of Secure C Landfill for disposal of hazardous and non-hazardous solid wastes as described in Condition 2 of Section III of this permit. Area I of Secure C Landfill was closed prior to promulgation of the Resource Conservation and Recovery Act and is not regulated by this permit. Operations within Area V (Cell 5A) of Secure C Landfill shall not commence prior to the completion of all construction activities as described in Condition 7 of Section III of this permit.

(a) Design

Secure C Landfill shall be maintained as per the designs and construction plans contained within the permit application documents cited in Condition 12(a) of Section II of this permit. All landfill cells shall be designed, constructed, and installed to prevent migration of waste out of the landfill to the adjacent subsurface soil, groundwater, or surface water at anytime during the active life and post-closure care period.

(1) Areas II and III of Secure C Landfill are designed and constructed as follows:

(i) The liner system is constructed of two liners which are installed so as to cover all surrounding earth likely to come into contact with waste and/or leachate.

(ii) The upper liner is constructed of a 30 mil (0.03 inch) Hypalon liner and is overlain by the landfill leachate collection system.

(iii) The lower liner is constructed of a 30 mil (0.03 inch) Hypalon liner and is overlain by the landfill leak detection system.

(iv) The lower liner is constructed upon a test-controlled compacted fill foundation to provide support to the liner.

(v) Each liner is suitable for the purpose intended and is compatible with both the waste

disposed and the leachate generated within the landfill.

(vi) The distance between the upper liner and lower liner is a minimum of twelve (12) inches and contains permeable fill material having a hydraulic conductivity of at least 1×10^{-2} centimeters per second which serves as the leak detection system. This layer consists of at least eight (8) inches of gravel overlain by at least four (4) inches of sand and is sloped to allow leaked leachate to drain by gravity to leachate detection sumps.

(vii) The upper liner is overlain by at least twelve (12) inches of gravel to provide protection for the liner and to allow for effective drainage of leachate. The layer has a hydraulic conductivity of at least 1×10^{-2} centimeters per second and is sloped to allow leachate to drain by gravity to leachate collection sumps.

(2) Area IV of Secure C Landfill is designed as follows:

(i) The liner system is constructed of two liners which are installed so as to cover all surrounding earth likely to come into contact with waste and/or leachate.

(ii) The upper liner is constructed of a 45 mil (0.045 inch) Hypalon liner and Typar 3341 geotextile and is overlain by the landfill leachate collection system.

(iii) The lower liner is constructed of a 45 mil (0.045 inch) Hypalon liner and Typar 3341 geotextile and is overlain by the landfill leak detection system.

(iv) The lower liner is underlain by three (3) feet of compacted clay constructed upon a test-controlled compacted fill foundation to provide support to the composite liner system.

(v) Each liner is suitable for the purpose intended and is compatible with both the hazardous waste disposed and the leachate generated within the landfill.

(vi) The distance between the upper liner and lower liner is a minimum of twelve (12) inches and contains permeable fill material having a hydraulic conductivity of at least 1×10^{-2} centimeters per second which serves as the

leak detection system. This layer consists of at least (6) inches of gravel overlain by a Typar 3341 geotextile and at least six (6) inches of sand. The layer is sloped to allow leaked leachate to drain by gravity to leachate detection sumps.

(vii) The upper liner is overlain by at least twenty-four (24) inches of gravel covered with a Typar 3341 geotextile to provide protection for the liner and to allow for effective drainage of leachate. The layer has a hydraulic conductivity of at least 1×10^{-2} centimeters per second and is sloped to allow leachate to drain by gravity to leachate collection sumps.

(3) Added 4/16/01
(3) Area V of Secure C Landfill is designed as follows:

(i) The double composite liner system shall be constructed of two liners which are installed so as to cover all surrounding earth likely to come into contact with waste and/or leachate.

(ii) Modified 8/31/01
(ii) The upper liner shall be constructed of a 60 mil (0.060 inch) high density polyethylene (HDPE) geomembrane and cushioning geotextile and overlain by the landfill leachate collection system.

(iii) The upper liner shall be underlain by a geosynthetic clay liner (GCL) installed over the leak detection system. Together the upper geomembrane and GCL shall comprise the upper liner system.

(iv) Modified 8/31/01
(iv) The lower liner shall be constructed of a 60 mil (0.060 inch) HDPE geomembrane and composite geonet/geotextile filter and overlain by the landfill leak detection system.

(v) The lower liner shall be underlain by a three (3) foot thick compacted clay liner (CCL) constructed upon a test-controlled compacted fill foundation to provide support to the composite liner system. Together the lower geomembrane and CCL shall comprise the lower liner system.

(vi) Each liner system shall be suitable for the purpose intended and shall be compatible with both the hazardous waste disposed and the leachate generated within the landfill.

(vii) The distance between the upper liner system and lower liner system shall be a minimum of twelve (12) inches and shall contain granular drainage material having a hydraulic conductivity of at least 1×10^{-2} centimeters per second and a bi-planar geonet with a transmissivity of 3×10^{-5} meters^2 per second or more. This leak detection layer shall be overlain by a geotextile filter and shall be sloped to allow leaked leachate to drain by gravity to leachate detection sumps.

(viii) The upper liner system shall be overlain by at least twenty-four (24) inches of gravel covered with a geotextile filter to provide protection for the liner and to allow for effective drainage of leachate. This leachate collection layer shall have a hydraulic conductivity of at least 1×10^{-2} centimeters per second and shall be sloped to allow leachate to drain by gravity to leachate collection sumps.

(b) Leachate Control

Secure C Landfill shall have the following systems maintained as identified within the permit application documents cited in Condition 12(a) of Section II of this permit.

(1) A leachate collection and removal system capable of handling all leachate generated during a 24-hour, 25-year storm and, at a minimum:

(i) Designed so that the leachate depth over the upper liner never exceeds 12 inches;

(ii) Constructed of materials which are chemically resistant to wastes disposed and leachate generated in the landfill;

(iii) Constructed of materials with sufficient strength and thickness to prevent collapse under pressures to be exerted by overlying waste, waste cover materials, and any equipment used on the landfill;

(iv) Designed and operated so that the system will function without clogging throughout the active life and post-closure care period; and

(v) Constructed so that all leachate flows by gravity into collection sumps.

(2) A leachate (leak) detection system constructed between the upper and lower liners which is designed to monitor for failure of the upper liner and is capable of collecting and removing all leachate generated from upper liner failure during the active life and post-closure care period. The system shall be:

(i) Constructed of materials which are chemically resistant to wastes disposed and leachate generated in the landfill;

(ii) Constructed of materials with sufficient strength and thickness to prevent collapse under pressures to be exerted by overlying waste, waste cover materials, and any equipment used on the landfill; and

(iii) Designed and operated so that the system will function without clogging throughout the active life and post-closure care period.

(3) A run-on control system to prevent the flow of storm water onto the active portions of the landfill during peak discharge from at least a 25-year storm.

(4) A run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(c) Modified 4/16/01
(c) Operation

(1) The permittee shall operate Areas II, III, IV, and V of Secure C Landfill as delineated in the permit application documents referenced in Condition 12(a) of Section II of this permit and the following operational standards:

(i) Collection and holding facilities associated with run-off and run-on control shall be managed after storms to maintain the design capacity of the systems.

(ii) Run-off from active portions of the landfill shall be directed into the leachate collection system to prevent the migration of pollutants from the landfill into surface and/or ground waters.

(iii) Leachate draining from the leachate collection system shall be pumped from the leachate collection sumps to the onsite wastewater treatment plant.

(iv) The volume of leachate collected in leachate (leak) detection sumps shall be measured to determine the leakage rate for each sump in accordance with 40 C.F.R. § 264.302(b). All leachate collected shall be pumped from sumps to the onsite wastewater treatment plant.

(v) Upon exceedence of the action leakage rate for any leachate (leak) detection sump, the permittee shall follow the response action procedures as described in the facility's Response Action Plan contained within the permit application documents cited in Condition 12(a) of Section II of this permit and as outlined at 40 C.F.R. §§ 264.304(b) and (c).

(vi) The permittee shall carry out all required groundwater monitoring activities during the active life of the facility and the post-closure care period as specified in the applicable permits.

(vii) The permittee shall operate the landfill so that no odors are detected offsite by sense of smell in any area of human use or occupancy.

(viii) The permittee shall control the potential for wind dispersal of waste by spraying sludge with water to minimize dusting, as necessary.

(ix) The permittee shall control rodents to prevent damage to the landfill.

(x) The permittee shall crush, shred, or similarly reduce in volume all contaminated equipment, debris, and other material prior to disposal in Secure C Landfill.

(2) The permittee is authorized to stabilize and solidify waste materials within dino containers or other shipping containers which are staged at the landfill while awaiting test results and approval for placement.

(3) The permittee is authorized to operate a mix-head or auger, and to utilize other equipment or materials on the landfill to aid in placement and strengthening of waste and other materials being disposed provided that the use of the equipment or materials does not constitute treatment which would violate Federal Land Disposal Restrictions.

(d) Operating Record Requirements

The permittee shall include the following items as part of the operating record:

(1) A map showing location, dimensions and depth of each area with respect to permanently surveyed benchmarks;

(2) Contents of each area; and

(3) The approximate location of hazardous wastes within each area.

(e) Monitoring and Reporting Requirements

The permittee shall perform the following, on an annual basis, and submit the results to the Department by April 30 of each year:

(1) Develop an as built plan showing topography and cross-section;

(2) Modified 8/31/01
(2) Certify, by letter prepared by a New Jersey Registered Professional Engineer, that the site preparations, dike constructions, and installations of the liner system, leachate collection system, leachate (leak) detection system, and final cover have been performed in accordance with the approved engineering designs and/or conditions of this permit;

(3) Modified 4/16/01
(3) Survey and monitor the differential settlement that may occur in all closed sections of areas II, III, IV, and V of the landfill.

(4) Develop strength data for sludge, ash, and any other materials landfilled or used in construction of the landfill. The strength data shall consist of total unit weight and strength parameters at a minimum; and

(5) Perform slope stability analysis using the strength data developed in (4) above.

2. Authorized Wastes

(a) The permittee is authorized to place the following wastes in Secure C Landfill:

(1) Dewatered sludge filter cake containing sludges generated by the onsite commercial wastewater treatment plant.

(2) Bulk waste, which does not contain free liquids, and which meets the applicable treatment standards for characteristic hazardous waste (Hazardous Waste "D" Numbers).

(3) Bulk waste, which does not contain free liquids, and which meets the applicable treatment standards for listed hazardous waste (Hazardous Waste "F", "K", "P", and "U" Numbers).

(4) Bulk solid materials, containing no free liquids and meeting all applicable treatment standards, including but not limited to:

- o contaminated equipment, ion exchange resins, crushed drums, diatomaceous earth, ditch cleanings, building rubble, other debris as defined in 40 C.F.R. § 268, spill cleanup residue, empty sample jars, molecular sieves, used sand blast grit, filter aids, activated charcoal, spent desiccants, contaminated clothing and protective equipment, spent silica gel, resins and waxes, contaminated asbestos and insulating agents, and excavated site soil;

- o ash residues from the DuPont Experimental Station (EPA ID No. DED 003 930 807 located in Wilmington, Delaware), and ash residues from other DuPont sources;

- o ID No. 27 solid wastes.

(b) The permittee shall not place any waste in Secure C Landfill which:

(1) Is prohibited from land disposal under 40 C.F.R. § 268;

(2) Is a characteristic hazardous waste (Hazardous Waste "D" Numbers) unless the waste has been treated to meet Federal Land Disposal Restrictions;

(3) Is a listed hazardous waste (Hazardous Waste "P", "U", "K" or "F" Numbers) unless the waste has been treated to meet Federal Land Disposal Restrictions;

(4) Contains a free liquid as determined by the Paint Filter Test, Method 9095, "Test Methods for Evaluating Solid Wastes, Liquids Physical/Chemical Methods" (EPA Publication No. SW-846);

(5) Contains polychlorinated biphenyls (PCB's) at a concentration greater than 50 ppm or greater than any future concentration limit set by the United States Environmental Protection Agency or the Department;

(6) Is radioactive as defined in 10 CFR Sections 20.105 and 20.306;

(7) Is not generated by a research & development, manufacturing, or waste treatment facility owned and operated by E.I. du Pont de Nemours & Company, Inc.;

(8) Is waste not specifically authorized by this permit.

3. Waste Analysis and Quality Assurance Requirements

(a) The permittee shall adhere to the provisions of the waste analysis plan cited in Condition 12(b)5 of Section II of this permit, and any subsequent revisions approved by the Department.

(b) Each wastestream accepted at this location shall be fully identified and classified in accordance with 40 C.F.R. § 264.13. At a minimum, the permittee shall develop all of the information which must be known to store, treat, and dispose of the waste onsite in accordance with the provisions of this permit, as well as to treat or dispose of the waste at authorized offsite facilities.

(1) Waste Characterization and Approval

(i) All generators of material destined for land disposal shall complete a Waste Characterization Form which shall contain all of the information which must be known for storage, treatment, or disposal of the wastestream. The Waste Characterization Form shall be as identified in the Waste Analysis Plan cited in Condition 12(b)5 of Section II of this permit or as otherwise approved by the Department.

(ii) Analytical testing shall be performed as necessary to verify chemical composition of the wastestream and to ensure that the waste meets land disposal restriction treatment standards. Sampling procedures and analytical

methods utilized shall be as described in the latest edition of SW-846, or as developed by DuPont Environmental Treatment for specific wastestreams handled at the site. In addition to analytical test results, other applicable information on the wastestream shall be attached to the Waste Characterization Form.

(iii) Once analyses are performed and the Waste Characterization Form is complete, the data shall be reviewed for compliance with Federal Land Disposal Restrictions. When wastes are determined to be acceptable for landfilling, a LDR Notification/Certification Form shall be prepared to indicate compliance with treatment standards. This form shall be included with the waste characterization information in the approval package.

(iv) The Waste Characterization Form and attachments thereto shall be reviewed by the Generator and Waste Coordinator before being circulated for approval. Formal approval by signature shall be required of the Waste Coordinator and Operations Manager, or their designates.

(v) An identification number shall be assigned to the approved waste characterization package which consists of a building number and wastestream number for Chambers Works wastestreams or a designation number for an offsite DuPont wastestream followed by the approval number.

(2) Waste Acceptance

(i) All waste shipments to the landfill shall be accompanied by a Waste Transportation Order, or equivalent form, as identified in the Waste Analysis Plan cited in Condition 12(b)5 of Section II of this permit. The Waste Characterization Form number shall be checked to verify that it is active and that the material matches the approved waste. The shipment shall then be entered into the Operating Log and the shipment placed in the landfill. Waste shipped from other DuPont facilities shall be accompanied by a properly completed bill of lading or hazardous waste manifest and a Land Disposal Restriction/ Certification Form as appropriate.

(ii) If bulk waste destined for disposal is found to contain gross free liquids, then the bulk waste shall be removed and dewatered prior to placement. Following dewatering, bulk waste

shall pass the paint filter test before placement is approved.

(iii) Waste sludge generated at the onsite WWTP shall be collected in dedicated dino containers and transported to the landfill. Each sludge shipment shall be accompanied by Waste Transportation Order. Dewatered sludges shall be collected, inspected for free-standing water, and received for landfill transfer by the WWTP operating group on a 24 hour basis.

Sludge shall be placed into the landfill and the placement location noted on the landfill operation record map. A grab sample of sludge to be landfilled shall be taken at least once per operation day. These samples shall be composited and analyzed for metals and certain organic compounds as specified in the waste analysis plan to confirm adherence to land disposal treatment standards. If the results of analysis for any organic compound or metal exceed the screening limits defined in the facility's Waste Analysis Plan, the entire day's production of sludge shall be segregated and staged at the landfill until the discrepancy is resolved by further analyses. If results of these analyses confirm that the sludge does not meet land disposal treatment standards, the sludge shall be removed from the landfill area and transported to the dewatering tank to await authorized onsite treatment or shipment to an authorized offsite facility.

(3) Waste Recertification

(i) Waste recertification is required for all active waste streams every two years. The recertification process shall include reanalysis by the generator, TCLP testing, paint filter testing, and evaluation of the Waste Characterization Form by the Environmental Coordinator, or equivalent, for compliance with existing regulations.

(ii) The new Waste Characterization Form and its attachments shall be formally approved by signature of the Waste Coordinator and Operations Manager or their designates.

(iii) If a wastestream is not recertified by DuPont Chambers Works within two (2) years of its most recent certification, or if the

wastestream cannot be properly characterized, then the wastestream shall not be accepted by DuPont Chambers Works.

(c) The permittee shall not accept any waste shipment which has not been adequately identified as specified in Condition 3(b) of Section III of this permit. The permittee shall not accept any waste type which is not authorized by Condition 2 of Section III of this permit.

(d) Sampling methods and all waste analyses performed shall be in accordance with the procedures outlined in the waste analysis plan cited in Condition 12(b)5 of Section II of this permit, and shall employ equipment and analysis methods as described in the latest edition of USEPA Manual SW-846 or as developed by Dupont Environmental Treatment and approved by the Department.

(e) The permittee shall maintain in the written Operating Record required by Condition 7 of Section II of this Permit, as per 40 C.F.R. § 264.73(b)(3), records and results of all waste analyses performed. Such records and results shall be entered into the written Operating Record as they become available and shall be maintained until closure of the facility.

(f) The permittee shall maintain the following information as per 40 C.F.R. § 270.30(j)(3)in the written Operating Record:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) the analyses were performed;

(4) The individual(s) who performed the analysis;

(5) The analytical techniques or methods used; and

(6) The results of the analysis.

(g) No changes shall be made to the Waste Analysis Plan without the prior approval of the Department.

4. Inspection Requirements (40 C.F.R. §264.15, §264.174, and § 270.14(b)(5)

(a) The permittee shall inspect the facility for malfunctions and deterioration, operator errors, and leaks or other discharges which may be a threat to human health and the environment. The permittee shall follow a written inspection schedule for inspection of operating areas, safety and emergency equipment, and general site safety and security devices as detailed in the permit application documents cited in Condition 12(a) of Section II of this permit and identified below. Results of the inspections shall be made part of the inspection log and shall be maintained as specified in Condition 4(b) of this section.

(1) Operating Areas

Area/Item	Inspect For	Frequency
Leachate Collection System	Proper Operation	Daily
	Leaks, Spills	Daily
	Damage	Daily
Leak Detection System	Proper Operation	Daily
	Leaks, Spills	Daily
	Damage	Daily
	Amount Removed	Weekly*
Dikes, Top Cover and/ or Side Cover	Erosion, Collapse	Daily
Working face	Run-on or Run-off	Daily
	Wind Dispersal of Dry Sludge or Cover Material	Daily

*Weekly monitoring of the leak detection system shall be conducted in accordance with the provisions of 40 C.F.R. § 264.303(c).

(2) Safety/Emergency Equipment

Area/Item	Inspect For	Frequency
Alarms	Function	Weekly
Telephones, communication equipment	Function	Weekly
First aid supplies	Availability	Weekly
Protective clothing	Availability	Weekly
Safety showers	Function	Weekly

Spill control supplies	Availability	Weekly
Fire control systems and equipment	In-Service Status Function	Weekly Semi-annual

(3) General Facility Safety and Security

Area/Item	Inspect For	Frequency
Housekeeping	Cleanliness, orderliness	Daily
Evacuation Routes	Obstructions	Daily
Fence, gates	Security, function	Daily
Warning signs	Availability, legibility	Daily

(b) A log shall be kept of all inspections specified in Condition 4(a), above, to confirm adequate maintenance of the hazardous waste landfill and all associated equipment. Results of all required inspections shall be maintained in the log at the facility for a minimum of three (3) years. At a minimum, this log must include the date and time of each inspection, the name of the inspectors, a notation of the observations made, and the date and nature of any repairs or other remedial actions performed.

(c) The permittee shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.

5. Closure of Hazardous Waste Management Units (40 C.F.R. § 264.110)

(a) At the time of final closure, the permittee shall close the facility in the manner that is stated in 40 C.F.R. § 264.110 in accordance with the general closure requirements detailed in 40 C.F.R. §§ 264.111 through 264.116, and specific hazardous waste landfill closure requirements detailed in 40 C.F.R. § 264.310, in accordance with the closure plan referenced in Condition 12(b)7 of Section II of this permit.

(b) The landfill shall be closed by placement of a final cover which is designed and constructed to provide long-term minimization of migration of liquids into the closed landfill. Installation of the specific elements of the final cover shall be monitored and inspected in accordance with the requirements of 40 C.F.R. §

264.303(a). At a minimum, the final cover design shall include the following elements:

(1) A surface layer consisting of a minimum six (6) inches of topsoil that will support a vegetative top cover which is resistant to wind and water erosion and will promote transpiration.

(2) A protective layer consisting of a minimum eighteen (18) inches of granular soil which will separate the underlying drainage layer and barrier components from physical intrusion.

(3) A geosynthetic composite drainage layer consisting of a bi-planar geonet (drainage material) covered on both sides by a non-woven geotextile (filtration and cushioning media) to allow the unobstructed flow of water to the surface water control system while preventing migration of soil particles into the barrier layer. This system is designed to:

(i) Reduce the head of water on the barrier layer to minimize infiltration;

(ii) Drain the protective layer to increase water storage capacity; and

(iii) Reduce pore water pressures in the cover soil to improve slope stability.

(4) A composite barrier layer consisting of a geomembrane (GM) placed directly over a geosynthetic clay liner (GCL) with an in-place hydraulic conductivity of 2.7×10^{-9} cm/sec. This system is designed to:

(i) Ensure the prevention of liquid flow into the landfill throughout the closure and post-closure care periods; and

(ii) Accommodate any settling and subsidence while maintaining performance and integrity.

(5) A bedding layer consisting of a minimum of twelve (12) inches of bedding material (waste sludge, soils, or other material) which is free of foreign matter or debris that could puncture the composite barrier layer.

(c) The permittee shall complete closure activities in accordance with the approved closure plan within 180 days after receiving the final volume of waste at the facility.

(d) The permittee shall submit certification by both the owner or operator and an independent professional engineer, licensed in the State of New Jersey, that the

facility has been closed in accordance with the closure plan specifications. The certification shall be submitted to the Department within two hundred forty (240) days from the date of implementation of the closure plan, in accordance with 40 C.F.R. § 264.115.

(e) The Department will review the certification documentation and will conduct a closure certification inspection. If the closure certification documents are complete and there is a satisfactory closure certification inspection, the closure certification will be accepted by the Department and the closure will be deemed complete.

(f) Within sixty (60) days from certification of closure, the permittee shall record a notation on the deed to the facility's property, or on some other instrument which is normally examined during a title search, that will in perpetuity notify any potential purchaser of the property that:

(1) The landfill has been used to manage hazardous waste; and

(2) Its use is restricted under 40 C.F.R. Subpart G; and

(3) The survey plat and record of the type, location and quantity of hazardous waste disposed in the landfill required by 40 C.F.R. §§ 264.116 and 264.119(a) have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Department.

(g) The permittee shall keep a copy of the closure plan and all revisions to the plan at the facility until closure is completed.

(h) The permittee shall amend the closure plan any time changes in operating plans or facility design affect the closure plan or whenever there is a change in the expected year of closure of the facility. The permittee must comply with the requirement cited at 40 C.F.R. § 264.112(c)(3) for amendment of closure plan.

(i) The permittee shall notify the Department at least forty five (45) days prior to the date the permittee expects to begin closure, except in cases where the facility's permit is terminated or if the facility is otherwise ordered by judicial decrees or compliance order to close. The date when the owner or operator "expects to begin closure" shall be within thirty (30) days after the date on which the owner or operator expects to receive the final volume of wastes.

6. Post-Closure Plan (40 C.F.R. § 264.118)

(a) The permittee shall maintain the landfill during the post-closure period in a manner consistent with the general post closure care requirements detailed in 40 C.F.R. §§ 264.117 through 264.120, and specific post-closure care requirements for hazardous waste landfills detailed in 40 C.F.R. § 264.310, in accordance with the post closure plan referenced in Condition 12(b)8 of Section II of this permit, and the following:

(1) The permittee shall conduct groundwater monitoring activities at the frequencies specified in the facility's NJPDES permit.

(2) The permittee shall perform maintenance activities at the site to ensure the integrity of the final cover and the function of the facility monitoring equipment.

(4) The permittee shall operate the leachate collection and removal system until the end of the post-closure period so that the leachate depth over the upper liner does not exceed one foot.

(5) The permittee shall maintain and monitor the leak detection system and notify the Department within seven days if a leak is detected.

(6) The permittee shall prevent run-on and run-off from eroding or otherwise damaging the final cover system.

(7) The permittee shall protect and maintain surveyed benchmarks.

(8) The permittee shall restrict access to the hazardous waste landfill as appropriate for its post-closure use.

(b) The permittee shall adhere to the following inspection schedule during the post-closure period:

Location	Inspection Type	Frequency*
Final Cap/Cover (Top and Sides)	Settlement	Annually
	Erosion	Monthly
	Cracking/Dessication	Monthly
	Ponding	Monthly
	Slope Discontinuities	Monthly
	Slumping/Bulging	Monthly
	Rodents/Burrows	Monthly
	Vegetation (Reseeding)	Monthly
	Vegetation (Overgrowth)	Bi-Monthly

Surface Water Control System	System Cleaning	Annually
	Proper Operation	Quarterly
	Erosion	Quarterly
	Vegetation(Overgrowth)	Quarterly
Leachate Collection System	System Cleaning	Annually
	Pump Calibration	Annually
	Proper Operation	Monthly
Leak Detection System	System Cleaning	Annually
	Proper Operation	Monthly
	Amount Removed	Monthly**
Groundwater Monitoring Wells	Accessibility	Monthly
	Deterioration	Monthly
	Locks/Covers	Monthly
Survey Monuments	Visibility	Quarterly
	Deterioration	Quarterly
Access Roads	Condition	Quarterly
Security Fence	Condition	Quarterly
	Gates/Locks	Quarterly

*At a minimum, all inspections shall be made at the frequencies given above. Additional inspections shall be required following severe storms or other events which could cause damage to the noted items.

**Monthly monitoring of the leak detection system shall be conducted in accordance with the provisions of 40 C.F.R. § 264.303(c).

(c) The permittee shall keep a copy of the existing post-closure plan, all revisions to the plan, and all post-closure inspection logs at the facility until the end of the post-closure period.

(d) Within sixty (60) days of any change to operating plans or facility design, or the occurance of any event which will impact the post-closure plan, the permittee shall amend the post-closure plan and submit a written request for permit modification to the Department for review in accordance with the requirements of 40 C.F.R. § 264.118(d) concerning the amendment of the post-closure plan.

(e) Within sixty (60) days of the completion of the post-closure care period, the permittee shall submit to the Department a certification that the post-closure care period was performed in accordance with the specifications in the approved post-closure plan. The certification shall be signed by the permittee and an independent registered professional engineer in accordance with the requirements of 40 C.F.R. § 264.120.

7. Added 4/16/01
7. Construction/Installation Requirements

(a) The permittee is authorized to construct cell 5A of Area V of Secure C Landfill in accordance with the construction plans and engineering designs contained within the permit application documents cited in Condition 12(a) of Section II of this permit. Construction/Installation authorization shall be conditioned upon the following:

(1) Monthly progress reports on construction activities shall be submitted to the Department at the addresses given in Condition 11(a) and (b) of Section II of this permit beginning at the end of the month in which construction activities commence for Area V. The first progress report shall include a tentative schedule of milestones to be achieved during the construction /installation of cell 5A. This construction schedule shall be updated and included in each successive monthly progress report.

Each report shall also contain text describing milestones achieved during the month, problems encountered with materials, field conditions, etc., significant deviations from the approved construction plans and engineering designs, and preliminary results of construction quality assurance and quality control (CQA/QC) sampling.

(2) Monitoring and testing of construction materials and installation methods shall be conducted in accordance with the CQA/QC plan submitted pursuant to the construction quality assurance program requirements of 40 C.F.R. § 264.19(b). Specifically, the permittee is required to document the quality of construction materials and the condition and manner of their installation throughout the project. Components of landfill construction to be monitored shall include but not be limited to the following:

- Site Clearing and Subgrade Preparation
- Placement of Structural Fill
- Dike Construction
- Double Composite Liner System Installation
- Leak Detection System Installation
- Leachate Collection System Installation
- Surface Preparation

Elements of the quality control program shall include but not be limited to the following:

- Material Handling and Storage
- Properties Identification/Conformance Testing
- Material Placement/Installation
- Post-Installation Inspections

- Field Sampling Procedures
- Non-Destructive Testing
- Destructive Testing
- Laboratory Protocol
- Material Repair/Replacement
- Protection of Work
- Recordkeeping and Reporting

(b) The permittee shall not commence operation of cell 5A of Area V of Secure C Landfill until the following conditions have been satisfied:

(1) The permittee has submitted all required progress reports in accordance with Condition 7(a)(1) of Section III of this permit and has complied with any response received from the Department concerning information presented within these reports.

(2) The permittee has completed all required CQA/QC sampling and testing in accordance with the approved CQA/QC plan and has submitted all results, including raw data, to the Department for review.

(3) The permittee has submitted to the Department at the address given in Condition 11(a) of Section II of this permit, by certified mail or hand delivery, a letter signed by the permittee and an independent, New Jersey licensed, professional engineer who has monitored construction/installation activities at the site throughout the project, which attests that cell 5A of Area V of Secure C Landfill has been constructed and installed in accordance with the approved construction plans and engineering designs specified in Condition 12 of Section II of this permit, with exceptions noted.

The certification letter shall be accompanied by a construction report which provides a general summary of the construction/installation process, itemizes deviations from the approved construction plans and engineering designs, and provides as-built drawings for the completed portions of cell 5A, including details on the tie-in of Area V with existing components of Areas III and IV of Secure C Landfill, as necessary.

(4) The permittee has submitted to the Department at the address given in Condition 11(a) of Section II of this permit, by certified mail or hand delivery, a certification letter signed by the CQA officer who administered the CQA/QC plan, which states that the approved plan has been successfully carried out and that cell 5A meets the requirements of 40 C.F.R. § 264.301(c). A report which provides raw CQA/QC data and analyses of all CQA/QC data collected over the course of the project shall be submitted along with the CQA officer's certification letter.

(5) The permittee has received written authorization from the Department which advises that the information submitted pursuant to items (1) through (4) above has been received and found to be satisfactory by the Department, that the Department has conducted an inspection of Area V of Secure C Landfill and has determined that construction of cell 5A has been successfully completed by the permittee, and that the permittee may commence disposal operations within cell 5A in accordance with Condition 1 of Section III of this permit.

End of Section III